

**From:** CHARLES GEBIEN  
**To:** BRUCE-DONALD, KARL-RICHARD, R5AIR.R5ORA.NARSETTE-VI...  
**Date:** Friday, January 24, 1997 2:43 pm  
**Subject:** Double A Metals Site, Chicago IL POLREP 1 (Special)

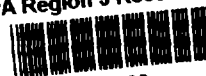
Attached is a special POLREP for the Double A Metals Site FYI. The purpose of this special POLREP is to inform you of unanticipated emergency response actions taken at the site by the Chicago Fire Department and ERCS during our ERCS site walk thru of 1/23/97.

We anticipated the start of a non-time critical removal action at the site on 2/3/97 and visited the site with the Chicago Department of Environment (CDOE) to plan our mobilization. Upon entry to the site we observed that scavengers had broken into the site and removed propane compressed gas cylinders and dumped wastes from a tank to "scrap out" the tank. At the request of the CDOE, a Chicago Fire Dept. hazmat team responded to a smoldering waste pile of what appeared to be bag house dust. The material was reacting with water which had leaked into the building and emitting an ammonia odor. START performed air monitoring until the hazmat team separated the reacting material from the main pile and terminated the reaction. ERCS purchased locks and secured the main gate to the site. The CDOE will inspect the site regularly until ERCS is mobilized on 2/3/97.

The attached POLREP was prepared in WP51 format.

**CC:** BENSING-MILAGROS, TURNER-KEVIN, GEBIEN-CHARLES

EPA Region 5 Records Ctr.



247999

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

POLREP

Date: January 24, 1997  
From: Charles Gebien, OSC, U.S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
Ginny Narsete, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, ORC (312)886-0747  
Joe Schuessler, CDOE (312)744-5257  
US Fish and Wildlife Service, IL.  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts IEPA-RPMS (217)782-1431  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Polrep 1 (Special)  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97

BACKGROUND:

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. Coordinates for the site are 87 degrees 43' 00" W longitude by 41 degrees 50' 00" N latitude. The site is located in an area of mixed industrial, commercial and residential development. The site is bordered to the west by Pulaski Avenue, to the north by a rail line, and to the south and east by an unnamed service road. A Commonwealth Edison power plant is located south of the site and a City of Chicago recycling center is located to the east. The nearest residence is located on Pulaski Road, approximately 300 feet north of the site.

The site is approximately four acres and is encircled by a deteriorated fence. The site contains two main buildings connected in an "L" shape, a large front yard with a loading dock, and a back yard area. The site is not secured, the fence has several holes, and the buildings contain graffiti, broken windows, and refuse.

The front and back yard areas contain large waste piles comprised of coarse slag. The waste piles vary in color and consistency. Some piles consist of brown material with rusted metal artifacts. Other piles are black with oxidized blue and white granules. One waste pile in the back yard appears to be fine-grained bag-house dust. The northern yard also contains four large electrical transformers which have been dismantled and stripped.

The loading dock is flooded with rainwater and has a sheen on the

surface. It contains tires, propane tanks, drums, a fire extinguisher, and other debris. Nine drums which contain fuel oil, solvents, and unknown materials are scattered throughout the outdoor dock area.

The west building is made of brick and contains four small rooms, one large room, an office area, and a partially closed area. The large room contains several piles of light gray material which has a very fine texture like a powder. This room also contains approximately 60 drums stacked on pallets. The small southwest room contains six drums of volatile organic material and a large compressed argon gas cylinder. The small southern room contains a tank and a drum. The small southeast room is filled with empty containers and debris. The office area on the west side of the main room contains debris and office furniture. The partially enclosed area contains about 20 bags of hydrated lime on a pallet. The small room on the east side of the west building contains three drums.

The east building is made of metal and glass and contains one large room. Approximately 80 percent of the ground space in this building is covered by waste piles similar to those in the main building on the site. This building also contains scattered empty drums and a large industrial furnace.

A Phase 1 Property Assessment of the site was prepared in 1990, by Gabriel Laboratories of Chicago, Illinois, for Jepsco Metals of Dixon, Illinois, parent company to Double A Metals. According to this document, operations related to recovery of aluminum on site began in approximately 1965 by the H. Winter Metal Company. Between 1983 and 1990, the site was operated by the Jay Armstrong Metals Company. Double A Metals, a subsidiary of Jepsco Metals, operated the site for only a short period, operations ended in approximately 1991. Prior to aluminum recovery, the site was used as a truck garage and for manufacturing operations which began in approximately 1917.

A Phase 2 Property Assessment of the site was completed in 1991 by Gabriel Laboratories. The assessment included 13 soil borings and sampling in areas where storage of fuel and lubricants was observed. Analytical results indicate that low levels of organic compounds are present in soil beneath the site. The borings indicate that the site is underlain by black and gray clay.

On September 24, 1996, Mr. Joseph Schuessler, City of Chicago Department of Environment (CDOE), Director of Toxic Pollution Control, referred the site to the U.S. EPA Emergency Response Branch (ERB) for consideration for a removal action.

On October 7, 1996, U.S. EPA On-Scene Coordinator (OSC) Charles Gebien, Ray Lechnen, U.S. Coast Guard, and START members met at the site to perform the site removal assessment. The site assessment

team members observed approximately 3000 cubic yards of lead contaminated bag house dust and slag scattered in waste piles throughout the site, over 100 drums of waste oils, solvents and unknown materials, and approximately 15 propane gas cylinders. The team also observed four large electrical transformers which were stripped and their oil was dumped onto the soil and a large industrial furnace which contained an asbestos like insulation.

During the site removal assessment, four drum samples, seven waste pile samples, one transformer sample, one insulation sample, and one water sample were collected. The samples were dark brown in color and appeared to be petroleum-based materials. Approximately 60 triple stacked drums were not accessible for sampling. Seven waste piles were sampled from both outside and inside the buildings. Location and appearance determined which piles were sampled to ensure obtaining all types of material. Samples were collected at 0 - 6 inches below the surface using a stainless steel hand shovel and stainless steel bowl to obtain a homogenized composite sample from six to ten locations within a waste pile. One composite transformer-area sample was obtained. A large insulated furnace was sampled for asbestos. One water sample was collected from the flooded area of the loading dock in various places. Drum samples were analyzed for pH, flash point, volatile organic compounds, and polychlorinated biphenyls (PCBs). The water and waste pile samples were analyzed for total Resource Conservation and Recovery Act (RCRA) metals. The transformer area sample was analyzed for PCBs. The insulation was analyzed for asbestos.

Four of the seven waste pile samples contained levels of TCLP lead in excess of 5 mg/l, with the highest level, 28.2 mg/L detected in sample WP-2. The average total lead levels for the seven waste pile samples is 1445 milligrams per kilogram (mg/kg), the highest is 3,180 mg/kg. Levels of arsenic and barium were detected in the water sample collected from the loading dock at levels below the Safe Drinking Water Act Maximum Contaminant Levels for these elements. The drum samples contained volatile organic compounds including xylene and ethyl benzene, and toluene. PCBs were not detected in the drum samples or in the soil sample collected near the transformers. Asbestos was not identified in the sample of material from the furnace.

On January 7, 1997, William Muno, Director, Superfund Division approved an Action Memorandum to perform a time-critical removal action at the site. On January 14, 1997, ERCS project officer Carl Norman requested a delivery order for \$200,000 Smith/Riedel (ERCS) to initiate a time-critical removal action.

#### ACTIONS TAKEN:

The following actions were taken on 1/23/97:

OSCs Turner and Gebien met with START, ERCS, and Joe Schuessler, CDOE to walk the site and plan our mobilization for 2/3. During the walk thru, we observed that scavengers had apparently broken into the site through the main gate and used a torches and truck to remove metal scrap. Items including 15 propane tanks, three transformer carcasses, and a steel tank which were identified during the 10/7/96 removal assessment were taken from the site. The content of the tank was spilled to the floor and many of the drums were tipped over. We also observed a smoldering pile of what appeared to be bag house dust on the floor of the main building. Joe Schuessler phoned Chief Eversol, CFD Hazmat, who in turn dispatched a hazmat unit to "open up" the pile to identify the source of the smoldering. The hazmat unit donned SCBAs and used shovels to move the smoldering material from the main pile. The smoldering material appeared to be reacting to snow melt entering thru the roof or nearby window. The smoldering ceased and the hazmat unit left the site. ERCS purchased a chain and padlocks, secured the main gate, and exited the site. CDOE will visit the site regularly until ERCS mobilizes on 2/3.

#### NEXT STEPS:

- ERCS will mobilize a crew of 2 members to the site during the week of 2/3/97.
- ERCS will assemble a support zone and clean debris from work areas.
- ERCS will repair the perimeter fence and repackage or overpack leaking and overturned drums.
- ERCS will initiate sampling of all drums, containers, waste piles and floor sweepings.

KEY ISSUES: None

#### COST INFORMATION:

	TO DATE	CEILING
ERCS (RES)	\$ 250	\$ 200,000

\* Estimates based on OSC estimate of 1/23/97.

NOTICE LETTER ACTIONS

Double A Metals site  
3321 S. Pulaski Road  
Chicago, Cook County, Illinois

U.S. EPA plans to take the following actions to address the release or threat of release of hazardous substances, pollutants or contaminants including compressed propane gas, lead contaminated dusts and slag and waste oils.

- 1) A site health and safety plan will be implemented, and the site will be secured by sealing broken doors and windows in the buildings, as needed. The site perimeter fence will be repaired.
- 2) The contents of drums and other containers will be segregated, staged, sampled, and categorized for disposal. Compatible waste streams will be bulked and disposed of off-site. Spillage will be cleaned from floors and the dock area.
- 3) Waste piles of bag house dust and slag will be treated to render them non-hazardous, and disposed of off-site.
- 4) Compressed gas cylinders will be returned to vendors or otherwise disposed of off-site.

U.S. EPA intends to begin the above actions on February 3, 1997. You must notify U.S. EPA by January 21, 1997, if you wish to perform or fund the above actions.

CONSENT FOR ACCESS TO PROPERTY

Name: ELWIN MILLSAP

Address  
of Property: 3321 S PULASKI RD, CHICAGO, IL 60623

I consent to officers, employees, contractors, and authorized representatives of the United States Environmental Protection Agency (U.S. EPA) entering and having continued access to this property for the following purposes:

Containing hazardous materials present on the property;

Conducting monitoring and sampling activity;

Preparing for and disposing of hazardous materials;

Performing other actions to investigate contamination on the property that U.S. EPA may determine to be necessary; and

Taking any response action to address any release or threatened release of a hazardous substance, pollutant or contaminant which U.S. EPA determines may pose an imminent and substantial endangerment to the public health or the environment.

I realize that these actions taken by U.S. EPA are undertaken pursuant to its response and enforcement responsibilities under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. § 9601 et seq.

This written permission is given by me voluntarily, on behalf of myself and all other co-owners of this property, with knowledge of my right to refuse and without threats or promises of any kind.

1-7-97  
Date

Elwin Millsap President  
Signature

**REGION V RISE INFORMATION FORM**

DATE: 11/13/96  
OSC/PHONE: Charles Gebien (312)353-7645  
SAM/PHONE:  
STATE CONTACT/PHONE: Cliff Gould, IEPA Maywood (708)338-7900  
OTHER CONTACTS: Joe Schuessler, Chicago DOE, (312) 744-9377  
WHO REPORTED SITE: Chicago DOE to Don Bruce ERS II  
SITE NAME: Double A Metals Site, Chicago, IL. formerly H. Winter Metals Co.  
CERCLIS ID NO.: None  
SITE SPECIFIC SPILL ID NO.: none  
LOCATION: 3321 South Pulaski Street, Chicago, Cook County, Illinois  
SITE OWNER NAME AND PHONE # Mr. Sammy Pool and Elwin Milsap,  
Americorp Realty Scott Robbins (630)990-8200 EXT21  
OPERATION STATUS: INACTIVE  
SITE DESCRIPTION: The site is an abandoned aluminum smelter and foundry, in which, drummed wastes, compressed gas cylinders and waste piles of baghouse dust/slag were abandoned. Site was formerly operated as H. Winter Co. The City of Chicago is investigating the status of the owners.  
TYPE OF OPERATION AND WASTES: Abandoned buildings and outdoor areas containing waste piles, compressed gas cylinders, and drums. OSC visited site on 9/30/96 with START and collected waste samples.  
SUSPECT RESOURCE DAMAGE: none.  
SITE RECON/SAMPLING DATE: 9/30/96  
SITE ASSESSMENT INVOLVEMENT: ? INTEGRATED ASSESSMENT: no  
REMEDIATION DECISION: none DATE OF DECISION:  
PREPARED BY: C. Gebien DATE: 11/13/96

**REGION V RISE INFORMATION FORM**

DATE: 11/13/96  
OSC/PHONE: Charles Gebien (312)353-7645  
SAM/PHONE:  
STATE CONTACT/PHONE: Cliff Gould, IEPA Maywood (708)338-7900  
OTHER CONTACTS: Joe Schuessler, Chicago DOE, (312) 744-9377  
WHO REPORTED SITE: Chicago DOE to Don Bruce ERS II  
SITE NAME: Double A Metals Site, Chicago, IL. formerly H. Winter Metals Co.  
CERCLIS ID NO.: None  
SITE SPECIFIC SPILL ID NO.: none  
LOCATION: 3121 South Pulaski Street, Chicago, Cook County, Illinois  
SITE OWNER NAME AND PHONE # Mr. Sammy Pool and Elwin Milsap, 365 N. Lockus, Aurora, IL. Americorp Realty Scott Robbins (630)990-8200 EXT21  
OPERATION STATUS: INACTIVE  
SITE DESCRIPTION: The site is an abandoned aluminum smelter and foundry, in which, drummed wastes, compressed gas cylinders and waste piles of baghouse dust/slag were abandoned. Site was formerly operated as H. Winter Co. The City of Chicago is investigating the status of the owners.  
TYPE OF OPERATION AND WASTES: Abandoned buildings and outdoor areas containing waste piles, compressed gas cylinders, and drums. OSC visited site on 9/30/96 with START and collected waste samples.  
SUSPECT RESOURCE DAMAGE: none.  
SITE RECON/SAMPLING DATE: 9/30/96  
SITE ASSESSMENT INVOLVEMENT: ? INTEGRATED ASSESSMENT: no  
REMEDIATION DECISION: none DATE OF DECISION:  
PREPARED BY: C. Gebien DATE: 11/13/96

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**POLREP**

Date: February 14, 1997  
From: Charles Gebien, OSC, U.S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Perrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, ORC (312)886-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts IEPA-RPMS (217)782-1431  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Polrep 2  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. See POLREP 1 for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the two week period of 2/3/97 to 2/14/97:

- On 2/3, START, OSCs Charles Gebien and Kevin Turner, and the Smith/Riedel clean up crew (ERCS) mobilized to the site. The ERCS crew consisted of two laborers and a response manager (RM). ERCS repaired the perimeter fence and cleaned debris from the support zone. Two rooms in the south end of North Building were cleaned and set up as a decon area and supply storage room. ERCS removed all tools and equipment at the end of each work day. At the end of the 2/6 work day, operations were demobed until 2/10, when a full cleanup crew, security services and heavy equipment could be provided by ERCS.

- On 2/10, START, OSCs Charles Gebien and Kevin Turner, and ERCS returned to the site. Office trailers, heavy equipment, portable toilets, a 48 KW generator, and security services were mobed to the site. The ERCS crew consists of an RM, a clerk, two equipment operators, and a laborer. ERCS cleaned debris from work areas and

placed it in a roll-off box. ERCS assembled a support zone in the dock area and south end of the North Building. Dross piles were moved away from the support zone to minimize tracking of dross by site traffic. Steel bins of dross in the dock area were emptied, crushed, and the dross was added to the existing dross piles. Baghouse dusts on the floor of the North Building near the support zone were wetted for dust control and moved to existing baghouse dust piles. A drum staging area was established in the North Building. START performed daily air monitoring with a combustible gas indicator (CGI), a portable gas chromatograph (Snapshot), and a Drager Pac 3 for ammonia. Slight ammonia odors were detected (maximum 3.0 ppm) in the hot zone while moving the outdoor dross piles with an excavator. ERCS obtained bids for analytical services and transportation/ disposal of dross/baghouse dust. ERCS sent a representative sample of dross/baghouse dust to a commercial lab for waste profiling analyses for land disposal. ERCS also contacted a secondary aluminum smelter and sent them a sample of the dross/baghouse dust for an evaluation of the material for smelting. On 2/14, John Perrecone and Mick Hans of U.S. EPA Office of Public Affairs (OPA) visited the site to obtain site information and observe operations.

#### **NEXT STEPS:**

- ERCS will continue to move the dross/baghouse dust piles to facilitate sampling and access for future T&D loading operations.
- ERCS will move all drums scattered throughout the site to the drum staging room.
- ERCS will initiate sampling of all drums, containers, waste piles and floor sweepings.
- ERCS will complete T&D arrangements for dross/baghouse dusts.

#### **KEY ISSUES:**

- The dross/baghouse dust in the North and East buildings contain ammonia compounds which are released as ammonia gas when the piles are disturbed or exposed to water. Start is collecting samples of the piles to better characterize the source and amount of ammonia. The presence of concentrated ammonia may complicate anticipated lead treatment operations for this material.

#### **COST INFORMATION:**

	TO DATE	CEILING
ERCS (RES)	\$ 30,150*	\$ 200,000

\* Estimate based on costs as of 2/14/97, and includes equipment await projection for one month.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY****POLREP**

Date: February 28, 1997  
From: Charles Gebien, OSC, U S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Perrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, ORC (312)886-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts IEPA-RPMS (217)782-1431  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Polrep 3  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. See previous POLREPs for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the two week period of 2/17/97 to 2/26/97:

- The BRCS crew used the excavator and loader to sort debris from the baghouse dust/dross piles and organized the piles to facilitate sampling and eventual loading for disposal. Metal bins containing dross were emptied and this material was added to the dross piles. The piles were measured and staked to establish 300 cubic yard (CY) segments. Each 300 CY segment was sampled and 31 samples were transported to Core Labs., Valparaiso, Indiana, for TCLP lead analyses. The total volume of baghouse dust/dross waste on site was re-estimated to be approximately 9,000 CY. The dross/baghouse dust were found to have no potential for further smelting. Gravel was procured and used to pave parking area and roadway for trucks. Disposal arrangements for the baghouse dust/dross piles were completed for Liberty Landfill, Monticello, Indiana and Allied Waste Streator Area Landfill, Streator, Illinois. All drums and

containers that were scattered about the site were moved to the drum staging area, inventoried, and sampled. A total of 52 containers were sampled and 40 samples were HAZCATTED. Approximately 30 drums remain to be sampled. START continued daily air monitoring with Drager Pac 3 for ammonia. On 2/28, John Ferrecone and Mick Hans of U.S. EPA Office of Public Affairs (OPA) and the Chicago Department of Environment (CDOE) held a media availability session at the site. Local television and newspaper media visited the site.

**NEXT STEPS:**

- ERCS will continue to move the dross/baghouse dust piles to facilitate sampling and access for future T&D loading operations.
- ERCS will complete transportation arrangements for the dross/baghouse dust and initiate shipment of the non-hazardous piles (< 5 ppm TCLP lead) for disposal.
- ERCS will initiate solidification of hazardous dross/baghouse dust material.
- Drum composite samples are to be analyzed for disposal purposes.

**KEY ISSUES:**

- The dross/baghouse dust in the North and East buildings contain ammonia compounds which are released as ammonia gas when the piles are physically disturbed or exposed to water. Elevated levels of ammonia, as high as 150 ppm, have been found in the North building for short durations, when the piles are moved and/or wetted for dust control. Although slight ammonia odors were occasionally detected (maximum 5.0 ppm) in the support zone, no odors were detected in off site locations.

**COST INFORMATION:**

	TO DATE	CEILING
ERCS (RES)	\$ 66,585*	\$ 200,000

\* Estimate based on costs as of 2/27/97, and includes equipment await projection for one month.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY****POLREP**

Date: March 13, 1997  
From: Charles Gebien, OSC, U.S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Perrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, ORC (312)886-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts IEPA-RPMS (217)782-3258  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Polrep 4  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. See previous POLREPs for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the two week period of 3/01/97 to 3/13/97:

A total of 2502 yd<sup>3</sup> (139 truck loads) of the non-hazardous aluminum dross was transported off site to Allied Waste, Inc., Streator Area Landfill, Streator, Illinois, to be landfilled. On a daily basis, non-hazardous dross located inside the buildings was brought outside, wetted, and mixed for both dust control and to control ammonia gas. All samples of drums were hazard categorized. A composite sample of each flammable liquids and dross contained in the drums was collected. The composite of dross in the drums was analyzed for TCLP lead and found to be less than 5 ppm TCLP lead. The composite sample of the flammable liquids was sent to a disposal facility for disposal approval. The drums of dross were emptied onto the non-hazardous dross pile outside and the empty drums crushed. Two rotary-type furnaces were emptied of dross and refractory and were cut up. A load of scrap metal was transported

off site. On a daily basis, the air was monitored for ammonia.

**NEXT STEPS:**

- ERCS will continue to move the dross/baghouse dust piles to facilitate T&D loading operations.
- ERCS will initiate stabilization of hazardous dross/baghouse dust material with flyash.
- Finalize disposal arrangements for the flammable liquids.

**KEY ISSUES:**

- The dross/baghouse dust in the North and East buildings contain ammonia compounds which are released as ammonia gas when the piles are physically disturbed or exposed to water. Elevated levels of ammonia, as high as 150 ppm, have been found in the North and East buildings for short durations, when the piles are moved and/or wetted for dust control. Although slight ammonia odors were occasionally detected (maximum 5.0 ppm) in the support zone, no odors were detected in off site locations.

**COST INFORMATION:**

	TO DATE	CEILING
ERCS (RES)	\$182,072*	\$ 400,000

\* Estimate based on costs as of 3/12/97, and includes equipment await projection for one month.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY****POLREP**

**Date:** March 27, 1997  
**From:** Charles Gebien, OSC, U.S. EPA, Region V  
**To:** Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Parrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, CRC (312)886-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everatts IEPA-RPMS (217)782-3258  
**Subject:** Double A Metals Site  
Chicago, IL  
**Polrep No:** Polrep 5  
**Site ID:** A572 CERCLIS ID# ILD025352139  
**D.O. No:** 5001 - 05 - 412  
**Response Auth.:** CERCLA/Time Critical  
**NPL Status:** NON-NPL  
**Start Date:** 01/23/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. See previous POLREPs for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the two week period of 3/14/97 to 3/27/97:

For this two-week period, a total of 1566 yd<sup>3</sup> (87 truck loads) of the non-hazardous aluminum dross (including baghouse dust and salt bath) was transported off site to Allied Waste, Inc., Streator Area Landfill, Streator, Illinois, to be landfilled. The North Building was emptied of dross and the concrete floor was swept. Piles 14 and 20 were treated with fly ash, passed TCLP lead analysis, and were disposed of as above. Pile 26 was treated and is awaiting TCLP lead analysis. Pile 28 is now being treated. The third and last

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY****POLREP**

Date: March 27, 1997  
From: Charles Gebien, OSC, U.S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Perrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Falipe Gomez, ORC (312)866-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts IEPA-RPMS (217)782-3258  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Polrep 5  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. See previous POLREPs for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the two week period of 3/14/97 to 3/27/97:

For this two-week period, a total of 1566 yd<sup>3</sup> (87 truck loads) of the non-hazardous aluminum dross (including baghouse dust and salt bath) was transported off site to Allied Waste, Inc., Streator Area Landfill, Streator, Illinois, to be landfilled. The North Building was emptied of dross and the concrete floor was swept. Piles 14 and 20 were treated with fly ash, passed TCLP lead analysis, and were disposed of as above. Pile 26 was treated and is awaiting TCLP lead analysis. Pile 28 is now being treated. The third and last

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**POLREP**

Date: April 11, 1997  
From: Charles Gebien, OSC, U.S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Perrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, ORC (312)886-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts, IEPA-RPMS (217)782-3258  
Victor Ceballos, GSEJP, (773)762-1758  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Polrep 6  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623. See previous POLREPs for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the two week period of 3/28/97 to 4/11/97:

For this two-week period, a total of 1872 yd<sup>3</sup> (104 truck loads) of the non-hazardous aluminum dross (including baghouse dust and salt bath) was transported off site to Allied Waste, Inc., Streator Area Landfill, Streator, Illinois, to be landfilled. The North and East Buildings were emptied of dross and the concrete floors were swept and rinsed. Piles 26 and 28 were treated and disposed of as above. The seven drums of flammable liquids (350 Gal.) were transported to Environmental Services of America, Inc. (ENSA), South Bend, Indiana, for fuels blending. The baghouse unit was dismantled, the bags and dust were removed and disposed of as above. Residual dross was scraped from the outdoor areas. Approximately 6 inches to 1 foot of on-site surface soils were

excavated.

A 30' x 30' grid was laid out for soil sampling around the site. Soil samples were collected at each of the grid nodes of the site in the areas which contained soil to evaluate lead content.

Air monitoring for ammonia was performed on a daily basis when handling the dross.

Members of the Gary School Environmental Justice Project (G.S. E.J.P.) and Gary School students visited and toured the site.

**NEXT STEPS:**

- Dispose of excavated contaminated soils.
- Complete decontamination of site areas.
- Perform decontamination of equipment used on site.
- Demobilize equipment and personnel.

**KEY ISSUES:**

- None

**COST INFORMATION:**

	TO DATE	CEILING
ERCS (RES)	\$346, 324*	\$ 400,000

\* Estimate based on costs as of 4/8/97, and includes equipment await projection for one month.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FINAL POLREP

Date: April 22, 1997  
From: Charles Gebien, OSC, U.S. EPA, Region V  
To: Kevin Mould, OSWER (703)603-9116  
Rick Karl, EERB  
John Perrecone, OPA (312)353-1155  
Don Bruce, EERB  
Bill Messenger, EERB (312)353-9176  
Felipe Gomez, ORC (312)886-0747  
Joe Schuessler, CDOE (312)744-6451  
US Coast Guard District 9 (216)522-2738  
Bruce Everetts, IEPA-RPMS (217)782-3258  
Victor Ceballos, GEEJP, (773)762-1758  
Subject: Double A Metals Site  
Chicago, IL  
Polrep No: Final Polrep (7)  
Site ID: A572 CERCLIS ID# ILD025352139  
D.O. No: 5001 - 05 - 412  
Response Auth.: CERCLA/Time Critical  
NPL Status: NON-NPL  
Start Date: 01/23/97  
Demobe Date: 04/16/97  
Complete Date: 04/16/97

**BACKGROUND:**

The Double A Metals site is an inactive aluminum dross recycler located at 3321 S. Pulaski Road, in Chicago, Cook County, Illinois 60623 (87 degrees 43'00" W longitude by 41 degrees 50'00" N latitude. See previous POLREPs for historical background information.

**ACTIONS TAKEN:**

The following actions were taken during the period of 4/12/97 to 4/16/97:

For this period, a total of 198 yd<sup>3</sup> (11 truck loads) of the non-hazardous aluminum dross recycling wastes (including baghouse dust, salt bath and excavated soils) were transported off site to Allied Waste, Inc., Streator Area Landfill, Streator, Illinois. The landfill is a typical industrial waste landfill and is not a hazardous waste landfill.

that grid areas G30, H30, H60, A420, F480, and G450 contained lead contaminated soil at levels as high as 1150 ppm. These areas were re-excavated an additional 1 foot in depth and excavated soil was disposed of as described above. Analyses of the re-excavated areas indicated total lead levels of less than 500 ppm except for G30 (679 ppm). All excavated areas were seeded with grass.

All equipment used for handling wastes was decontaminated. Residue from the recessed concrete dock area was sampled and found to contain 361 ppm total lead. Concrete blocks were placed at all gates and the gates were locked to prevent unauthorized access. All equipment and personnel were demobilized from the site.

#### **NEXT STEPS:**

- Forward analytical data from Core Labs for on-site excavated areas to assist the IDPH with their site health consultation.

- Organize and transport site files to the the Records Management Center (7th Floor, 77 W. Jackson, Chicago, IL.)

#### **RESULTS ACHIEVED:**

As described in the Action Memo, all aluminum dross recycling wastes including; slag, dross, baghouse dust, and salt bath were removed from the site. As described in the attached Waste Disposal Summary Table, a total of 6552 yd<sup>3</sup> or 7,035 tons (364 truck loads) of the non-hazardous aluminum dross recycling wastes and excavated soil was land disposed at Allied Waste, Inc., Streator Area Landfill, Streator, Illinois. A total of 1500 yd<sup>3</sup> of D008 hazardous aluminum dross was treated with fly ash, rendered non-hazardous, and was disposed of as non-hazardous aluminum dross as descibed above. All waste oil and flammable liquids (350 Gal.) were repackaged into seven drums and were transported to Environmental Services of America, Inc. (ENSA), South Bend, Indiana, for fuels blending. The North and East Buildings were emptied of dross recycling wastes and the concrete floors were swept and rinsed. The bag house unit was dismantled and the bags and dust were removed and disposed of as described above. Three rotary furnaces were emptied of dross and refractory and were scrapped. Throughout the removal operations, the dusty

materials were treated with water to control dust and ammonia emissions.

Residual dross was scraped from the ground in the outdoor areas. A grid with 30' x 30' sections was laid out for sampling unpaved areas within the site. Soil samples were collected at each of the grid nodes and each sample was analyzed for total arsenic and lead content by Core Labs. Approximately 6 inches to 2 feet of on-site surface soils were excavated until all grid areas exhibited less than 500 ppm total lead, or a maximum two foot depth was excavated. See the attached grid map.

Five soil samples were collected from off-site locations North (residential) and West (commercial) of the site. The samples were analyzed for total lead by Core Labs. As shown on the attached Analytical Results Summary Table (samples OS-1 thru O-S5), total lead levels ranged from 19 ppm to 369 ppm. The Illinois Department of Public Health is preparing a health consultation for ATSDR to identify any potential health threats from the site.

#### **KEY ISSUES:**

- The North and East Buildings are in poor structural condition, and may pose a physical hazard to persons entering the site. A portion of the interior wall between the buildings collapsed and the area is marked with caution tape. The Chicago DOE has informed the Chicago Building Department of the situation.

#### **COST INFORMATION:**

	TO DATE	CEILING
ERCS (RES)	\$382,000*	\$ 400,000

\* Estimate based on costs as of 4/17/97, and includes all await costs.

**WASTE DISPOSAL SUMMARY TABLE**  
**DOUBLE A METALS SITE**  
**Chicago, Illinois**

Waste Category	Quantity	Date Shipped	Manifest Number	Disposal Method	Facility, Location
Treated Aluminum Dross, Non-hazardous Special Waste	216 yd <sup>3</sup> (12 truck loads)	03/03/97	IL7102194-99, IL7102200-03, 05, 06	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	468 yd <sup>3</sup> (26 truck loads)	03/04/97	IL7102207-11, IL7187551-59, IL7187507-09	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	504 yd <sup>3</sup> (28 loads)	03/05/97	IL7187501-06, 10-29, 31, 60	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	576 yd <sup>3</sup> (32 loads)	03/06/97	IL7187530, 32- 50, 61, 62, 63	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	666 yd <sup>3</sup> (37 loads)	03/07/97	IL7187564-600	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	72 yd <sup>3</sup> (4 loads)	03/12/97	IL7187601-04	landfill	Allied Waste, Inc. Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	666 yd <sup>3</sup> (37 loads)	03/14/97	IL7187605-41	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	468 yd <sup>3</sup> (26 loads)	03/17/97	IL7187642-64, 69-71	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL

Waste Category	Quantity	Date Shipped	Manifest Number	Disposal Method	Facility, Location
Treated Aluminum Dross, Non-hazardous Special Waste	396 yd <sup>3</sup> (22 loads)	03/21/97	IL7187665-68, 72-89	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	252 yd <sup>3</sup> (14 loads)	03/24/97	IL7187690-703	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	288 yd <sup>3</sup> (16 loads)	03/26/97	IL7187704-16, 18-20	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	342 yd <sup>3</sup> (19 loads)	03/28/97	IL7187717, 21-38	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	360 yd <sup>3</sup> (20 loads)	04/02/97	IL7187739-66	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	360 yd <sup>3</sup> (20 loads)	04/04/97	IL7187759-78	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	486 yd <sup>3</sup> (27 loads)	04/07/97	IL7187779-805	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
RQ Waste Flammable liquids, n.o.s. (acetone/toluene based solution)	350 gallons (7 drums)	04/07/97	INA1141422	fuels blending	Environmental Services of America, Inc., South Bend, IN
Treated Aluminum Dross, Non-hazardous Special Waste	252 yd <sup>3</sup> (14 loads)	04/09/97	IL7187806-19	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL
Treated Aluminum Dross, Non-hazardous Special Waste	72 yd <sup>3</sup> (4 loads)	04/10/97	IL7187820-23	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL

Waste Category	Quantity	Date Shipped	Manifest Number	Disposal Method	Facility, Location
Treated Aluminum Dross, Non-hazardous Special Waste	126 yd <sup>3</sup> 17 loads	04/14/97	IL7187824-30	landfill	Allied Waste, Inc., Streator Area Landfill, Streator, IL

Total volume dross shipped off site = 6552 yd<sup>3</sup> (364 loads)

**Analytical Results Summary Table**  
**Double A Metals**

Sample Number	Date Collected	Total Lead (ppm)	TCLP Lead (ppm)	Sample Description
DUST	02-17-97	1290	1.25	Baghouse dust sample for possible treatability study
SLAG	02-17-97	221	0.11	Slag/dross sample for possible treatability study
P1	02-19-97	NA	0.50	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P2	02-19-97	NA	0.14	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P3	02-19-97	NA	0.11	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P4	02-19-97	NA	0.15	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P5	02-19-97	NA	0.21	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P6	02-19-97	NA	0.07	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P7	02-19-97	NA	0.81	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P8	02-19-97	NA	0.14	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P9	02-19-97	NA	1.92	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P10	02-19-97	NA	2.50	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P11	02-19-97	NA	1.49	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P12	02-19-97	NA	0.12	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)

Sample Number	Date Collected	Total Lead (ppm)	TCLP Lead (ppm)	Sample Description
P13	02-19-97	NA	0.09	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P14	02-19-97	NA	5.06	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P15	02-19-97	NA	0.86	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P16	02-19-97	NA	0.22	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P17	02-19-97	NA	2.18	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P18	02-19-97	NA	2.86	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P19	02-19-97	NA	0.51	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P20	02-19-97	NA	5.1	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P21	02-19-97	NA	0.49	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P22	02-19-97	NA	0.90	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P23	02-24-97	NA	2.81	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P24	02-24-97	NA	1.03	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P25	02-24-97	NA	1.28	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P26	02-24-97	NA	5.60	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)

Sample Number	Date Collected	Total Lead ppm	TCLP Lead (ppm)	Sample Description
P27	02-24-97	NA	2.28	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P28	02-24-97	NA	10.6	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P29	02-24-97	NA	4.36	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P30	02-24-97	NA	1.89	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
P31	02-24-97	NA	0.76	300 ton (approx. 300 yd <sup>3</sup> ) section of a dross pile (see map in file)
SL2-10F	02-28-97	NA	8.79 (pH = 10)	composite of P14 & P20 treated with 10% flyash
SL2-20F	02-28-97	NA	2.80 (pH = 11)	composite of P14 & P20 treated with 20% flyash
SL2-10L	02-28-97	NA	5.78 (pH = 12)	composite of P14 & P20 treated with 10% lime
SL2-20L	02-28-97	NA	12)	composite of P14 & P20 treated with 20% lime
S1	02-28-97	243	NA	soil composite from underneath gravel in north yard
DRCOMP-1	03-07-97	NA	0.43	composite of dross in drums
-1	03-18-97	NA	1.4	composite of stabilized P20
ST-2	03-20-97	NA	2.40	composite of stabilized P14
OS-1	03-24-97	19.1	NA	Off-site soil sample
OS-2	03-24-97	23.8	NA	Off-site soil sample
OS-3	03-24-97	369	NA	Off-site soil sample
OS-4	03-24-97	244	NA	Off-site soil sample
OS-5	03-24-97	249	NA	Off-site soil sample
ST-3	03-25-97	NA	0.49	composite of stabilized P26
FLR-1	04-08-97	148	NA	Composite of soil, where concrete floor is missing, in East Building
ST-4	03-28-97	NA	1.24	composite of stabilized P28-1

Sample Number	Date Collected	Total Lead (ppm)	TCLP Lead (ppm)	Sample Description
ST-5	04-01-97	NA	1.2	composite of stabilized P28-2
DOCK-1	04-15-97	361	NA	residue from recessed dock

NA = this parameter was not analyzed for in this sample.

NR = results not received yet.

Note: Table does not include disposal approval sample analyses.

**SOIL GRID SAMPLING  
RESULTS TABLE  
DOUBLE A METALS SITE  
Chicago, Illinois**

Grid Designation	Total Lead (mg/Kg)	Total Arsenic (mg/Kg)
<b>South Yard:</b>		
A0	61.9	NA
A30	153	NA
A60	436	NA
A90	63.9	NA
B0	466	NA
B30	316	9
B60	274	7
B90	189	5
C0	446	NA
C30	74.9	<4
C60	124	<5
C90	157	6
D0	378	NA
D30	102	5
D60	272	9
D90	281	8
E0	519	12
E30	274	7
E60	520	9
E90	41.4	6
F30	75.3	6
F60	457	26
F90	264	9
F120	307	9
F150	315	9

**SOIL GRID SAMPLING  
RESULTS TABLE  
DOUBLE A METALS SITE  
Chicago, Illinois**

Grid Designation	Total Lead (mg/Kg)	Total Arsenic (mg/Kg)
<b>South Yard:</b>		
A0	61.9	NA
A30	153	NA
A60	436	NA
A90	63.9	NA
B0	466	NA
B30	316	9
B60	274	7
B90	189	5
C0	446	NA
C30	74.9	<4
C60	124	<5
C90	157	6
D0	378	NA
D30	102	5
D60	272	9
D90	281	8
E0	519	12
E30	274	7
E60	520	9
F90	41.4	6
F30	75.3	6
F60	457	26
F90	264	9
F120	306	9

Grid Designation	Total Lead (mg Kg)	Total Arsenic (mg Kg)
G60	314	19
G90	346	6
G120	161	9
H30	666 <sup>1</sup> , 50.4	11
H60	680 <sup>1</sup> , 483	9
H90	183	4
<b>North Yard:</b>		
A420	1070 <sup>1</sup> , 174	7
B450	295	<5
C420	444	<5
C450	253	9
D420	680	4
D450	113	12
D480	34.1	13
E420	525	<5
E450	226	20
E480	72.2	6
F450	327	6
F480	934 <sup>1</sup> , 52.4	11
G450	753 <sup>1</sup> , 268	11
G480	256	9.4
S1 <sup>2</sup>	243	NA

<sup>1</sup> Soil in this grid area was re-excavated. Number which follows is final concentration.

<sup>2</sup> S1 is a composite soil sample collected before gravel was spread out in North Yard. S1 is therefore a composite of grids A450, A480, B450, B480, C450, and C480.

NA = Not Analyzed.

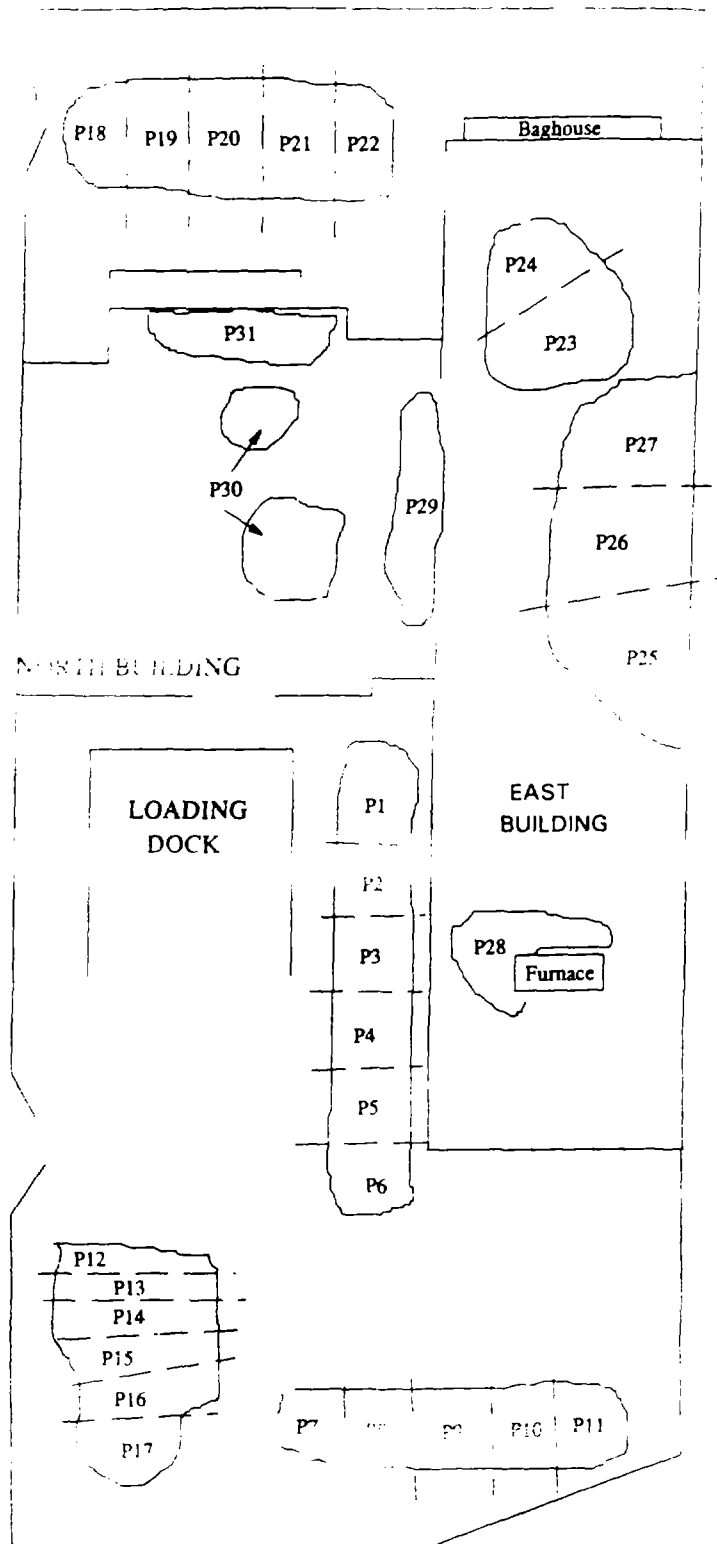
Grid Designation	Total Lead (mg/Kg)	Total Arsenic (mg/Kg)
G60	314	10
G90	346	6
G120	161	9
H30	666 <sup>1</sup> , 50.4	11
H60	680 <sup>1</sup> , 483	9
H90	183	4
<b>North Yard:</b>		
A420	1070 <sup>1</sup> , 174	7
B450	295	<5
C420	444	<5
C450	253	0
D420	680	<4
D450	113	12
D480	34.1	13
E420	525	<5
E450	226	20
E480	72.2	6
F450	327	6
F480	934 <sup>1</sup> , 52.4	11
G450	753 <sup>1</sup> , 268	11
G480	256	9.4
S1 <sup>2</sup>	243	NA

<sup>1</sup> Soil in this grid area was re-excavated. Number which follows is final concentration.

<sup>2</sup> S1 is a composite soil sample collected before gravel was spread out in North Yard. S1 is therefore a composite of grids A450, A480, B450, B480, C450, and C480.

NA = Not Analyzed.

Pulaski Road



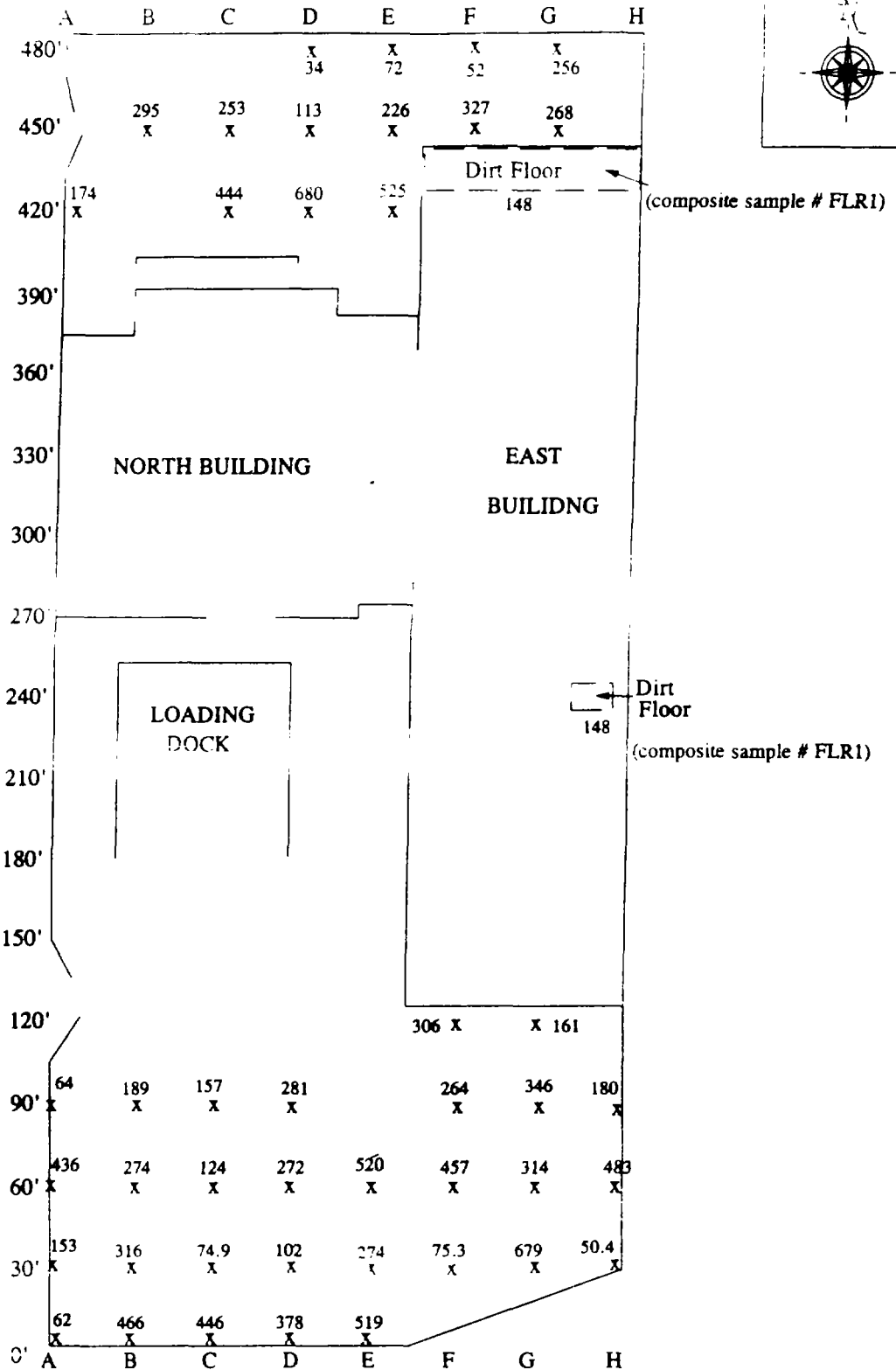
Note: Pile Designations (P1 - P28) Indicate 300 ton Increments

Surveved Dross Piles

FIGURE #

1

Pulaski Road



**LEGEND:**

X - Sample Location

Note: Results are in mg/kg.

**TITLE**  
Soil Grid Sampling Map And Results  
**DATE** Dec 15, 2010

**FIGURE #** 2  
**SCALE** 1" = 100'